Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of the claims in the application.

Listing of Claims

1. (Currently amended) A method for monitoring eukaryotic cell integrity under test conditions that are suspected of causing cell lysis, the method comprising

(i) subjecting ~~cells~~ a cell culture to the conditions,

(ii) adding adenosine diphosphate (ADP) to the ~~sample~~ cell culture, under conditions which allow the conversion of ADP to adenosine triphosphate (ATP) by cellular adenylate kinase,

(iii) detecting ATP in the ~~sample~~ cell culture and relating that to the presence of adenylate kinase and thus to the eukaryotic cell integrity.

Claims 2 and 3 cancelled.

4. (Currently amended) A method according to ~~claim 3~~ claim 1 wherein the test conditions comprise addition of a reagent.

5. (Previously amended) A method according to claim 4 wherein the reagent is a compound which is being screened for pharmaceutical application.

6. (Original) A method according to claim 5 wherein the cell preparation is a tumour cell line in culture medium and the reagent is suspected of having anti-cancer applications.

Claim 7 cancelled.

8. (Currently amended) A method according to ~~claim 7~~ claim 1 wherein the ~~environmental factor is~~ test condition is exposure to a selected temperature, pH, pressure, irradiation or the presence of a particular gaseous environment.

9. (Original) A method according to claim 1 which is used to diagnose infection of the cells by a lytic virus.

10. (Previously amended) A method according to claim 1 which is used in toxicity testing.

11. (Currently amended) A method ~~according to claim 1 which is used to monitor~~ for monitoring the condition of eukaryotic cells ~~in a sample, wherein after step (i) and prior to step (ii), cells which have been incubated under test conditions are lysed, and thereafter the quantity of ATP detected is used to determine the condition of the cells.~~ in a cell culture under a test condition, the method comprising

(i) culturing a cell culture under the test condition;

(ii) lysing cells in the cell culture;

(iii) adding adenosine diphosphate (ADP) to the cell culture under conditions that allow the conversion of ADP to adenosine triphosphate (ATP) by cellular adenylate kinase; and

(iv) detecting ATP in the cell culture and relating that to the condition of the one or more cells.

12. (Currently amended) A method according to claim 11 wherein the ~~sample~~ cell culture contains a known amount of cells, and in step (i), it is cultured under test conditions which are suspected of affecting the condition of the cells.

13. (Previously amended) A method according to claim 12 wherein the test conditions comprise addition of a reagent.

14. (Previously amended) A method according to claim 13 wherein the reagent is a compound which is being screened for growth factor activity.

15. (Previously amended) A method according to claim 12 wherein the test conditions comprise variation in an environmental factor.

16. (Previously amended) A method according to claim 15 wherein the environmental factor is temperature, pH, pressure, irradiation or the presence of a particular gaseous environment.

Claims 17-19 cancelled.

20. (Currently amended) A method according to claim 11, wherein the cells are lysed by addition of a lytic agent.

21. (Previously Amended) A test kit for performing a method according to claim 1, which comprises substantially pure ADP, detection reagents and cell culture medium.

22. (Original) A test kit according to claim 21 wherein the detection reagents are luciferase/luciferin which is substantially free of contaminating enzymes.

Claim 23 cancelled.